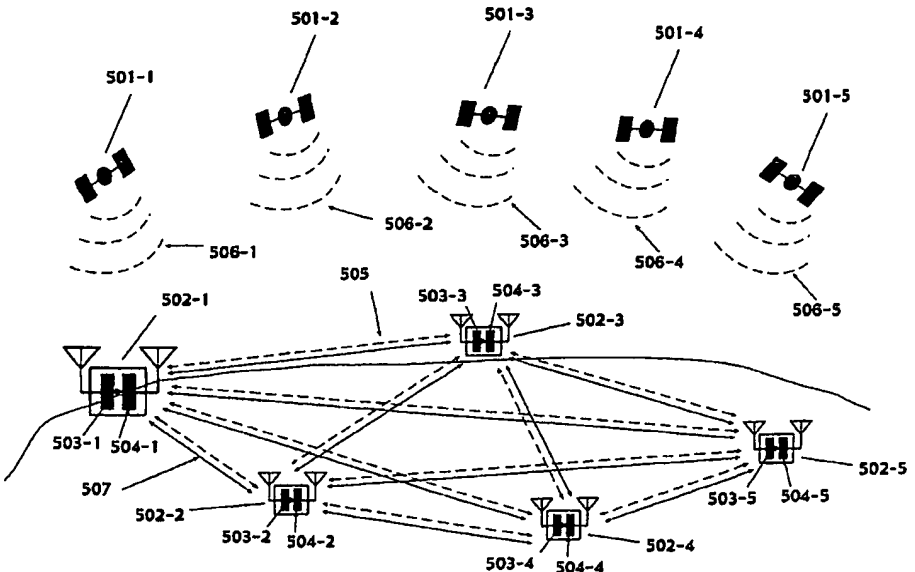




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>G01S 5/02, 5/14, H04B 7/185</b>	<b>A1</b>	(11) International Publication Number: <b>WO 99/63358</b> (43) International Publication Date: 9 December 1999 (09.12.99)
<p>(21) International Application Number: PCT/AU99/00423</p> <p>(22) International Filing Date: 28 May 1999 (28.05.99)</p> <p>(30) Priority Data: PP 3754 29 May 1998 (29.05.98) AU</p> <p>(71) Applicant (for all designated States except US): Q COMMUNICATIONS PTY. LTD. [AU/AU]; Unit 4, Georgia Court, 1 Totterdell Street, Ginninderra Heights, ACT 2617 (AU).</p> <p>(72) Inventor; and (75) Inventor/Applicant (for US only): SMALL, David [AU/AU]; Unit 4, Georgia Court, 1 Totterdell Street, Ginninderra Heights, ACT 2617 (AU).</p> <p>(74) Common Representative: SMALL, David; Unit 4, Georgia Court, 1 Totterdell Street, Ginninderra Heights, ACT 2617 (AU).</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p>
<p>(54) Title: A METHOD AND DEVICE FOR CREATING A NETWORK POSITIONING SYSTEM (NPS)</p>  <p>(57) Abstract</p> <p>A network positioning system (NPS) uses GNSS-like signals transmitted from a GNSS-synchronised network of terrestrially based, low cost positioning-unit devices. These positioning-unit devices are used for the determination of absolute and relative position in satellite obscured environments, thus allowing seamless transition between GNSS and NPS, e.g., outdoors to indoor. Positioning-unit devices are self-integrating, thus allowing effortless integration of positioning-unit devices into both the GNSS and the NPS network.</p>		